ScanLog 96

Universal Single / Dual Channel Composite DataLogger with PC / Pen-Drive Interface

PPI
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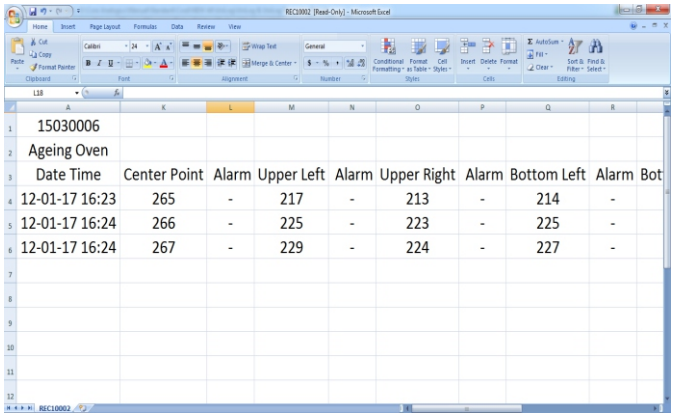
Single / Dual Channel Recorder + PC Interface

Single / Dual Channel Recorder + Pen-Drive Interface



	A	K	L	M	N	O	P	Q	R
1	15030006								
2	Ageing Oven								
3	Date Time	Center Point	Alarm	Upper Left	Alarm	Upper Right	Alarm	Bottom Left	Alarm	Bot
4	12-01-17 16:23	265	-	217	-	213	-	214	-	
5	12-01-17 16:24	266	-	225	-	223	-	225	-	
6	12-01-17 16:24	267	-	229	-	224	-	227	-	

Features

- 2 Rows of 16 Characters LCD Display & 4 Tactile Keys
- Single / Dual Universal Analog Channels
- Independent Jumper-less Input Type Selection :
  7 Thermocouple Types, RTD Pt100, mV, V, mA
- Fast Channel Update Rate : 250 mS per Channel
- Each Channel with Up to 4 Programmable Soft Alarms
- 2 Common Relay Outputs for Alarms
- Alarm Acknowledge through Front Panel Key & Back Panel Terminals
- Optional, 5V **or** 24V DC Excitation Voltage Output
- User Assigned Channel Names for Easy PV Identification
- Huge Data Storage Capacity : Appx. 38,56,000 Records
- Date / Time Stamped Process Value (PV) & Alarm Status Recording with Programmable Recording Interval
- Event Generated Records : Power-up, Alarm Toggle, RTC / Recording Interval Changed
- Continuous or Batch Recording
- Free 21 CFR Part 11 Compliant Software with PC Interface Version
- Easy Data Transfer to PC in Excel Format for Pen-Drive Version
- Supply Voltage : 85 to 264 VAC, 50/60 Hz

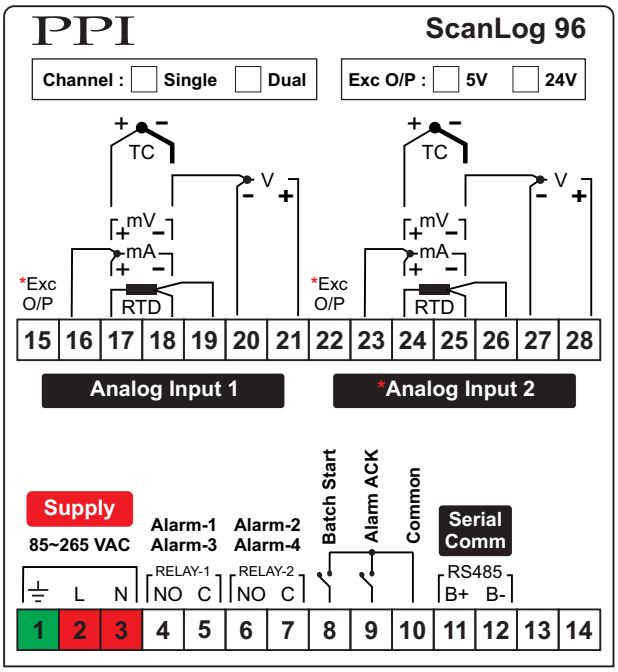
Specifications

Operator Interface	
Display	2 Rows of 16 Characters LCD Display with Back-Light LED
Keys	4 Tactile Switches PAGE, DOWN, UP, ENTER / Alarm ACK
Sensor Input	
Input Types	Thermocouple : J, K, T, R, S, B, N RTD Pt100, 3 wire DC Linear : 0-20 mA, 4-20 mA 0-80 mV 0-1.25 V, 0-5 V, 0-10 V, 1-5 V
Accuracy	mA, mV, V : ± 0.25% of reading ± 1 LSD Thermocouple : ± 0.25% of reading ± 1.5 ºC RTD : ± 0.25% of reading ± 0.5 ºC
Corrections	• In-built Cold-Junction Compensation for Thermocouples (Accuracy Better than ± 1.5°C) • In-built Lead Resistance Compensation for RTD (Up to 2.5Ω in each lead)
Display Range	Thermocouples & RTD : Refer Table 1 DC Linear Volts / Current : Adjustable from -19999 to +30000 Counts
Zero Offset	User Adjustable over Full Range for Each Channel
ADC	16 Bit (± 32,768 Counts), Sigma-Delta (ΣΔ)
Sampling Time	250 mS Per Channel
Input Impedance	Greater than 8 MΩ for RTD, Thermocouple & 0 to 80 mV Input 200 KΩ for 0-1.25 V, 0-5 V, 0-10 V, 1-5 V Input 3.9Ω Precision Shunt Resistor for 0-20 mA & 4-20 mA Input
Normal Mode Rejection	> 40dB at 50/60 Hz
Signal Conditioning	Analog Filter : First Order Low-Pass RC Filter. Cutoff Frequency at 6Hz (3dB at 6Hz with roll-off rate of 20dB/decade) Digital Filter : Programmable Digital Filter Between 0.5 to 60.0 Seconds
Input Protection	ESD : 8KV EFT : 2KV Surge : 1KV
Display Resolution (User Programmable)	For Thermocouples & RTD : 0.1 / 1 °C / ºF For DC Linear Volts / Current : 0.001 / 0.01 / 0.1 / 1 Counts
Alarms	
Numbers	4 Independent for Each Channel
Programmable Parameters	Type : Process Low, Process High Logic : Normal, Reverse Hysteresis : 1 to 3000 Unit Counts Inhibit : No, Yes
Outputs (Optional)	Relay Change-over Contacts Relay-1 : Common for Alarm-1 & Alarm-3 of All Channels Relay-2 : Common for Alarm-2 & Alarm-4 of All Channels
Outputs	
Relay	Contact Type : Potential-free Change-over Contacts Contact Rating : 5A for 250 VAC / 5A for 30VDC (Resistive Load)
Recording	
Recording Capacity	2 GB Flash Memory (Approx. 38,56,000 Records)
Recording Mode	Continuous, Batch
Recording Interval	Programmable from 1 Sec to 2 Hr : 30 Min : 00 Sec

Power Supply	
Type	Switch Mode (SMPS)
Line Voltage	85 to 264 VAC, 50/60Hz
Consumption	6VA Max
Physical	
Mounting	Plug-in with Panel Mounting Clamps
Overall Dimensions	96 (H) X 96 (W) X 106 (D), mm
Panel Cutout	92 (H) X 92 (W), mm
Terminals	Pluggable Terminal Blocks
Environmental	
Operating Ambient	0 to 55°C & 5 to 90%RH Non-condensing
Storage Temperature	-10 to 70°C
Atmospheres	Not Suitable for use in Corrosive or Explosive Atmospheres. The Panel in which the Instrument is Mounted must be free of Electrically Conductive Pollution.
PC Interface	
Device Serial Port	Port : RS485, 2-wire, Half Duplex, Start-Stop Synchronized Slave ID : 1 to 127 Max. Units per Loop : 31 Max. Distance : 1200 Meters
Supported Operating Systems (OS)	• Windows Vista • Windows 7 • 32 bit / 64 bit Windows 8 • 32 bit / 64 bit Pentium Dual Core
Minimum PC Configuration Requirements	• 2.8 GHz Clock Speed • 2 GB RAM • 40 GB Hard Disk
PC Software Features (USFDA 21 CFR Part 11 Compliant)	• Supports Multiple ScanLog 96 on Single Installation • Auto Start-up on PC Power-up • Online Display of Process Values & Stored Records in Graphical & Tabular Forms with Alarm Indications • SMS and/or Email Alerts on Alarm Conditions • Mean Kinetic Temperature (MKT) Computation • Automatic Periodic Downloading of Records Stored in ScanLog 96 • Access Control According to Authority Level • User Actions with Signing & Authorization • Automatic Password Expiry • Manual & Auto Back-up Facility with Archiving • Data Log Reports with User Configurable Title, Footer & Header • Data Log Report, Alarm Log Report, History Graph & Audit Trail Report in PDF & EXCEL formats • Audit Trail History of Critical Events & User Actions
Pen-Drive Interface	
Pen-Drive Support	USB 2.0, Format : FAT, Socket : Type A
File Operation	Read *Set.txt* file Write .csv files (Data Records)

Table 1 : Temperature Ranges for Thermocouples & RTD		
Input Type	**Range (Min. to Max.)**	**Resolution**
Type J Thermocouple (Fe-K)	0.0 to +960.0°C / +32.0 to +1760.0°F	1 °C **or** 0.1 °C (Programmable)
Type K Thermocouple (Cr-Al)	-200.0 to +1376.0°C / -328.0 to +2508.0°F	
Type T Thermocouple (Cu-Con)	-200.0 to +387.0°C / -328.0 to +728.0°F	
Type R Thermocouple (Pt/Pt-Rh13%)	0.0 to +1771.0°C / +32.0 to +3219.0°F	
Type S Thermocouple (Pt/Pt-Rh10%)	0.0 to +1768.0°C / +32.0 to +3214.0°F	
Type B Thermocouple	0.0 to +1826.0°C / +32.0 to +3218.0°F	
Type N Thermocouple	0.0 to +1314.0°C / +32.0 to +2397.0°F	
3-wire, RTD Pt100		1°C **or** 0.1 °C

Back Panel Terminations



***Notes:**

1. Analog Input 2 connections (terminals 23 to 28) are applicable only for Dual Channel version.
2. Excitation Voltage output (terminals 15 & 22) is available optionally.
3. Serial Communication Port (terminals 11 & 12) is available for PC Interface version only.

Ordering Code

Channels	
S	Single
D	Dual

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Interface	
PD	Pen-Drive
PC	Personal Computer

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Excitation Voltage	
N	None
5	5 VDC @ 15 mA
24	24 VDC @ 40 mA

Example Code **S - PD - 24**
Single Channel, Pen-Drive Interface, 24 VDC @ 40 mA Excitation Voltage

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